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THE OTHER SIDE OF THE DEPENDENCE ON FOREIGN OIL

by

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Contents

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Biography

Mr. James Hoffman currently serves as a requirements and integration analyst with the Airborne Integration Division, National Geospatial-Intelligence Agency (NGA) Element Joint Functional Component Command for Intelligence, Surveillance, and Reconnaissance (JFCC-ISR). In this capacity, Mr. Hoffman manages operational and technical issues related to airborne tasking, collection, processing, exploitation, and dissemination (TCPED) between NGA, the U.S. military, and other organizations in the Intelligence Community and Federal government.

Prior to assuming his current duties in September 2008, Mr. Hoffman served as a geospatial analyst assigned to NGA's Iraq Military Issues Branch. There he conducted spatial-temporal analysis and worked issues related to northern Iraq and Iraqi reconstruction. During the Iraq surge in 2007, Mr. Hoffman served as the Office of Central and Southwest Asia's liaison to the Defense Intelligence Agency's Iraq Intelligence Cell. There he led a team of analysts that provided direct geospatial support to DIA's all-source analysts.

During his time with NGA, Mr. Hoffman has completed two four month deployments in support of Operation Iraqi Freedom. During his first deployment in 2008, Mr. Hoffman served as the site lead for NGA's Geospatial Support Team embedded with the 1st Armored Division near Tikrit, Iraq. His team provided geospatial intelligence support to the Division and its subordinate brigade combat teams located in northern Iraq. In 2009, on his second deployment, Mr. Hoffman was embedded with II Marine Expeditionary Force at Al Asad Air Base in western Iraq. On this occasion, he provided geospatial intelligence to the Marines of Regimental Combat Team – 8, 1st Radio Battalion, and 1st Intelligence Battalion.

Prior to joining NGA, Mr. Hoffman held a commission in the United States Air Force, where he served as an intelligence officer assigned to the 9^{th} Intelligence Squadron at Beale Air Force Base, California. Before joining the USAF, Mr. Hoffman spent two years as a senior urban planner for the municipal government of Dallas, Texas.

Mr. Hoffman holds a Bachelor of Arts degree in Economics from the University of North Carolina at Chapel Hill and a Master of Science degree in City and Regional Planning from the University of Tennessee at Knoxville.

"For the sake of our economy, our security, and the future of our planet, I will set a clear goal as president: In 10 years, we will finally end our dependence on oil from the Middle East." – then Presidential Candidate Barack Obama, 28 August 2008.

The United States' economy is dependent on imported oil and a lot of it. For the month of August 2010, according to the U.S. Energy Information Administration, the United States imported roughly 380 million barrels of crude oil or roughly one out of four barrels produced globally—nearly two-thirds of the amount it consumed—at a cost of just over $29 billion.[1] The costs of this dependency elicit constant calls from within the United States, including from every president since Richard Nixon, to become energy independent and stop what U.S. oil tycoon T. Boone Pickens calls the "greatest transfer of wealth in the history of mankind."[2] But while many are aware of this dependency, few are aware of the fact that many of the world's largest oil exporting countries are just as dependent on selling the oil as the United States is on buying it. If wealth is being transferred out of the U.S., then someone else is receiving that wealth. Due to this relationship, if something were to cause the U.S. and other major industrialized economies to consume less oil it would undoubtedly impact these oil exporting countries in some very serious ways.

A decline in the quantity of oil demanded would negatively impact the world price of oil. For so-called rentier states that are dependent on exporting crude oil, the impact of declining oil prices would be shrinking economies and shrinking revenue for their governments. These governments, due to their strong reliance on oil revenue for defense and security spending and

[1] U.S. Energy Information Administration, www.eia.gov
[2] T. Boone Pickens' Website, www.pickensplan.com/theplan

robust public services and welfare programs, would face a stark new fiscal reality. This reality, in combination with other social, economic, and political forces, would result in an increased likelihood of political instability, internal turmoil, and vulnerability to external actors. The purpose of this work is to examine these forces and their potential impacts and explore the other side of oil dependence—the dependence on selling it. The ramifications of this dependence, shared to varying degrees by the six Gulf Cooperative Council (GCC) countries,[3] will be explored with a particular focus on the case of Saudi Arabia.

The End of Oil?

While it is not the purpose of this paper to delve deep into the developments that could have an impact of the amount of oil the United States and other major economies consume, it is important to mention some of them for purpose of illustrating the potential for change. It is also important to note that while it is almost impossible for us imagine a world where oil is not an expensive strategic resource, people just over 100 years ago would have had the same difficulty imagining a world where *salt* did not occupy the same position as an expensive strategic resource. For thousands of years salt was extremely coveted due to its utility and near monopoly when it came to food preservation that it caused wars, namely the 15th century *Guerra del Sale* that was fought between Italian city states, and inspired exploration and colonialism. But "[w]ith the advent of canning, electricity and refrigeration, salt lost its strategic status."[4] Technological advances changed the status of salt. The same could happen to oil.

There are potential technological advances that could have a significant impact on the amount of oil the United States consumes. With the vast majority, 71%[5], of U.S. oil

[3] Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates
[4] Korin and Luft, *Turning Oil Into Salt*, 3.
[5] U.S. Energy Information Administration, www.eia.gov

consumption being used for transportation, it is likely that technological advances in that sector will have the largest impact on overall consumption. These advances could include vehicles that run on alternative fuels such as biodiesel, hydrogen, liquid nitrogen, or natural gas. They could also include advances in hybrid-electric, plug-in electric, and solar vehicle technologies. There could also be advances that greatly improve the efficiency of the traditional petroleum powered engine. And while some these technologies are currently in their infancy, many are already in operation and simply need to be produced at a lower cost in order to be mass marketed.

Other changes that could greatly impact the quantity of oil consumed in the United States concern consumer behavior. As the economic costs of using petroleum for transportation increase and the environmental costs start to be realized, more U.S. consumers are looking for alternatives to petroleum. These alternatives include a higher demand for the technologies mentioned above, changes in land use that emphasize mixed-use developments and a greater emphasis on mass transit and options for pedestrians.

While technological advances and changing consumer behavior could intentionally change the demand for petroleum in the U.S., macroeconomic events could unintentionally impact oil demand as well. This was recently seen in 2008 when the financial meltdown caused a recession that led to a nearly 80% drop in the price of oil from its high in July to its low in December.[6] It is easy to imagine a worse economic crisis having an even larger impact on the price of oil.

Rentier Economies and Power

As shown in table 1, the economies of the GCC experienced strong growth during the first decade of the 21st century. This is largely a result of the relatively high oil prices of the last

[6] U.S. Energy Information Administration, http://www.eia.gov

decade up until the “Great Recession” of 2008. A large portion of GCC income is derived from the sale of petroleum, so while the rising price of oil pushed income levels higher, its direct impact on the economy also grew from 30.8% of GDP in 2002 to 40% in 2006.[7] Additionally, oil’s share of exports also grew from 61% to 67% during the same period.[8]

Country	**Per Capita GDP 2009**[9]	**% Per Capita GDP Growth 2000-2009**[10]	**Tax Revenue as % of GDP**[11]	**Military Expenditure as % of GDP**[12]
World Average	13,161	42%	22.1%	2.4%
Bahrain	27,214	39%	2.7%	3.2%
Kuwait	37,849	19%	3.1%	3.8%
Oman	25,635	66%	3.3%	10.4%
Qatar	78,260	44%	2.6%	2.5%
Saudi Arabia	23,271	35%	5.6%	9.2%
UAE	36,843	32%	1.0%	5.9%
GCC Average	38,179	38%	3.1%	5.8%

Table 1

Due to such a large proportion of their income being derived from the export of petroleum, the GCC countries are considered to be *rentier states*. “Rentier states are…those countries that receive on a regular basis substantial amounts of external rent.”[13] In this case, the term *rent* refers to “the share of wealth given to landowners because they have an exclusive right to the use of those natural capabilities.”[14] In the case of the GCC, this external rent comes from exporting oil. Rentier states have a different pattern of development as opposed to more diversified economies. One characteristic of oil rentier states is that their dependence on oil

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[7] Saif, "The Oil Boom in the GCC Countries," 3.
[8] *Ibid.*
[9] International Monetary Fund, World Economic Outlook Database, Figures in current international dollars based on PPP, http://www.imf.org
[10] *Ibid.*
[11] Heritage Foundation, 2010 Index of Economic Freedom
[12] Stockholm International Peace Research Institute, www.sipri.org
[13] Mahdavy "The Pattern and Problems of Economic Development in a Rentier State," 428.
[14] George, *Progress and Poverty*, 150.

tends to grow despite efforts to diversify.[15] Because of the amount of external rent available, oil production tends to crowd out other private sector economic development. This is due to the fact that the profit potential for most other activities pales in comparison to the rents available from oil. This retards the diversification of the economy. Furthermore, due to the minimal labor requirements for the extraction and transport of petroleum, there is only a small portion of the labor force directly involved.[16]

In the GCC, the combination of state-owned oil companies and the implications of having rentier economies have lead to political, economic and societal peculiarities. The primary source of capital in these countries is from the extraction of petroleum. Since the governments own the oil companies and the rights to the petroleum, they accumulate the economic rent.[17] Due to this domination of the oil wealth, "[t]he state becomes a redistributor of economic rent through public services, as well as overt and covert funding of the private sector" largely through the use of transfer payments and subsidies.[18] This leads to the non-petroleum sectors of the economy becoming less efficient and less competitive. In time they will become mere "parasites" of the oil fueled public sector where their survival depends on government intervention and support.[19] This leads to economic survival being dependent on government largess as opposed to productivity and profitability. When political conflicts arise the government uses its position in the economy to tamp down dissent and reward loyalty.[20] These peculiarities create a situation where the government utilizes fiscal policy as a means of maintaining its power base and insuring that its citizenry are kept complacent through the strategic redistribution of oil wealth

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[15] Noreng, *Oil and Islam*, 151.
[16] Sorenson, *Introduction to the Modern Middle East*, 82.
[17] Noreng, Oil and Islam, 154.
[18] *Ibid.*
[19] *Ibid.*
[20] *Ibid.*

through well-funded social services and a large government workforce, an almost non-existent tax burden, and a strong military apparatus.

The amount of oil revenue also enables the government of the GCC to keep the tax burden on their populations extremely low or altogether non-existent. In 2006, oil revenue accounted for 86% of GCC government revenue.[21] As shown in table 1, the tax burden as a percentage of the GDP, the average in 2010 for the GCC is 3.1%.[22] This is much lower than the world average of just over 22%. The use of oil revenue versus tax revenue means that the residents of the GCC countries enjoy public services at very little personal cost.

Government oil revenues are used to provide a multitude of social services and subsidies. The robust oil revenues are used to fund large subsidies for energy, food and water among other things. In Saudi Arabia, subsidies for 2010 accounted for 3.8% of the budget. This is a 52% increase in subsidies since 2006.[23] The government of Saudi Arabia heavily subsidizes agricultural production, fuels, and water production. In the case of water, consumers only pay 1% of the cost to produce well and desalinized water.[24]

Health and education is also funded by the government with oil revenue. In the GCC, all levels of education are universally provided at government expense. Supplies, meals, uniforms, and transportation are all provided.[25] The quality of the education is generally high with most of the teachers being brought in from other countries.[26] In 2008 expenditures on education accounted for 12.5% and 12.3% of total government spending in Qatar and Bahrain

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[21] Saif, *The Oil Boom in the GCC Countries*, 3.
[22] Heritage Foundation, 2010 Index of Economic Freedom
[23] Saudi Arabian Monetary Agency, Annual Report 2007 and 2010, www.sama.gov.sa
[24] AFP, "Power, water subsidies big burden on Saudi budget"
[25] Grossman, Towards A Typology of Welfare Regimes in the Arab World, 24.
[26] *Ibid.*

respectively.[27] Healthcare in the GCC is also provided with government funding. Healthcare in the region is high in quality and robust.[28] In Bahrain, healthcare is universally provided free of charge to all citizens and foreign residents. In addition to general primary care, it also includes full dental, maternity, pediatric, and psychiatric care.[29] In Kuwait, the situation is very similar. It also offers universal healthcare free of cost. In Kuwait, healthcare services even include veterinary care.[30]

In addition to funding public services, the governments of the GCC also use their vast oil revenue to serve as the employer extraordinaire in their respective economies by funding a large, extremely well-paid force of civil servants. In the GCC, public sector employment is all but guaranteed for nationals and is often preferred over the private sector due to "relatively high wages, job security, social allowances, and generous retirement benefits."[31] This preference for public work is shown by the fact that in 2001 in all GCC countries, with the exception of Bahrain, well over 50% of the national workforce was employed by the public sector.[32] The relatively high wages of public sector workers stands out considerably in Saudi Arabia and Kuwait. In Saudi Arabia in 2009, the average monthly wage of a male worker in the private sector was SR991, while the average monthly wage of the lowest level general public sector worker was SR2530.[33] In Kuwait, from the 2000-01 to the 2008-09 fiscal years, public sector wages grew 22% per year on average.[34] This took place even though inflation during this period

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[27] International Monetary Fund, Government Finance Statistics
[28] Grossman, Towards a Typology of Welfare Regimes in the Arab World, 24.
[29] *Ibid.*
[30] *Ibid.*
[31] Fasano and Iqbal, *GCC Countries*, 7.
[32] *Ibid.*
[33] Saudi Arabian Monetary Agency, Annual Report 2010, http://sama.gov.sa
[34] *Kuwait Times*, "Kuwait: Public sector wages rise by 22% annually"

only averaged 3.3%.[35] These numbers are even more illustrative when compared to public sector wages in a country that lacks the oil wealth of the GCC. In Syria, overall male private sector wages were 3.3% higher than in the public sector, and for those males with college educations private sector wages were 8% higher than wages in the public sector.[36]

Oil revenues are also used fund well-resourced militaries in the GCC. In 2009, nearly a third of the Saudi Arabian government's budget was dedicated to "defense and national security."[37] As shown in table 1, in 2007 all six GCC states spent a larger portion of their respective GDP on military expenditures than the world average. Additionally, in 2008 Oman, Kuwait, Saudi Arabia, and Bahrain were among the top 15 countries worldwide when it comes to military spending per capita with Oman coming third after Israel and the United States.[38] The military spending can be attributed to multiple truths. The countries of the GCC find themselves geographically situated in a rough neighborhood with numerous potential external threats to include nearby Iran. There are also a plethora of internal threats due to various realities including religious extremism and general political discontent. Additionally, foreign arms manufacturers eyeing the huge petrol dollar surpluses put a great deal of pressure on the governments to purchase the latest and greatest weaponry available for the capabilities and prestige that accompany such acquisitions.[39] Moreover, these acquisitions please the elite of the military/security establishment reinforcing their allegiance to the governing authority.[40]

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[35] International Monetary Fund, World Economic Outlook Database
[36] Kabbani, "Why Young Syrians Prefer Public Sector Jobs" 5.
[37] Saudi Arabian Monetary Agency, Annual Report 2010, http://sama.gov.sa
[38] Stockholm International Peace Research Institute, http://www.sipri.org
[39] Noreng, *Oil and Islam*, 13.
[40] *Ibid.*

The GCC countries are also experiencing rapid population growth. Between 2000 and 2009, the population for the GCC grew by 35% to just over 39.5 million people.[41] The U.S. Census Bureau estimates that the GCC will continue to see staggering population growth for the foreseeable future with the population growing by another 24% by 2025, and by 63% by 2050. It is also worth noting, as shown in figure 1, there is a youth bulge in the GCC that will continue to increase. This working age population will demand jobs putting additional pressure on the economies and the governments to absorb them.

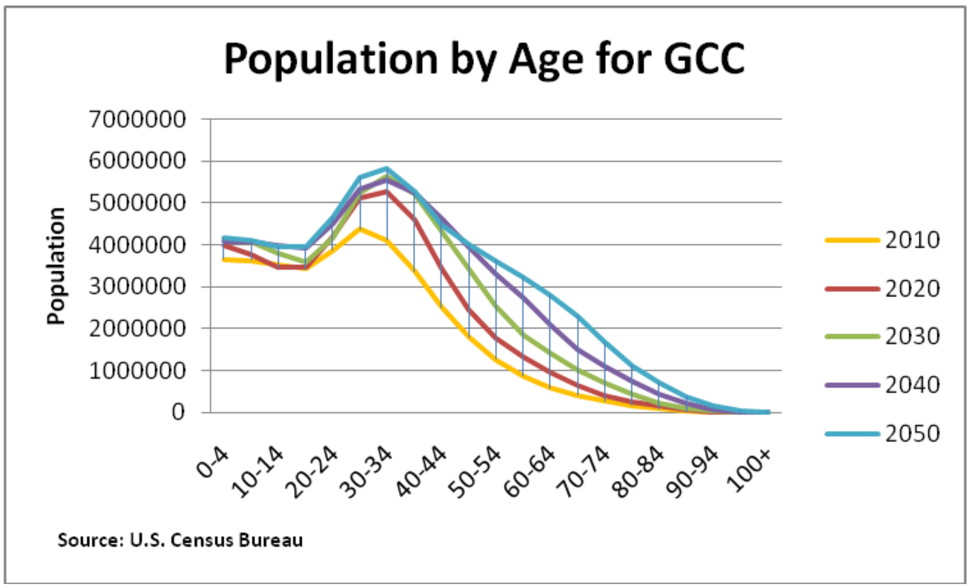

Figure 1

Less Oil Demand—Lower Oil Prices

As was previously stated, a decline in the amount of oil demanded would lead to a decline in the price of oil. For the GCC, their dependency on oil would make them extremely vulnerable to the negative demand shock and would have serious direct implications for their governments and their economies. With roughly 40% of the GCC's GDP, 86% of its governments' revenue and over two-thirds of export income due to oil exports in 2006, it is easy

[41] *Ibid.*

to recognize that lower oil prices would have a profound impact.[42] As the price of oil dropped, aggregate income would fall as well. The drop in export income would also disrupt the current account balance. Additionally, there would be indirect effects on the economy as a drop in income causes a drop in domestic consumption. This would lead to an increase in unemployment.

The worsening economic situation, in particular rising unemployment, would put pressure on the government to act. Due to their dependence on oil rent for revenue, with 86 cents of every dollar coming from oil, the governments of the GCC would see their budgets and ability to intervene in their domestic economies shrink substantially. Their only options would be to borrow, cut spending, raise taxes, or a combination of these. Borrowing would only be a short term solution and would be extremely difficult to do if creditors recognize that the mainstay of GCC economic vitality—oil—was losing its value permanently. Cutting spending and/or raising taxes would have large political ramifications in this region. These ramifications will be discussed later. The fact is that the change in oil demand would lead to a change in the political and economic paradigm for the region. The situation would require a change in the current social contract between the government and its citizens. These changes, in addition to the stresses created by worsening economic conditions, would likely lead to social instability and political upheaval.

The Changing Relationship: Saudi Arabia

Saudi Arabia is the largest in terms of size and population of the six GCC states. It has the largest portion of the world's proven oil reserves and is also extremely dependent on these reserves for its economic vitality. In 2008, nearly 90% of its government's revenue and over

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[42] Saif, *The Oil Boom in the GCC Countries*, 3.

three-fifths of the country's GDP was due to oil revenue.[43] Its heavy dependence on oil rent and relative lack of economic diversity is typical of a rentier state. Also typical of rentier state is the fact that despite efforts to diversify the economy away from its dependence on a single commodity, Saudi Arabia saw oil's portion of gross exports grow from 76% in 2002 to 81.7% in 2006 and oil's contribution to GDP rise from 30% in 2002 to 61% by 2008.[44]

There are certain characteristics of the Saudi Arabian political economy that make economic diversification and reform difficult to execute. The foremost characteristic is that the government of Saudi Arabia is an absolute monarchy largely based on *Sharia* law without a semblance of representation. The ruling royal family, not surprisingly, seeks to preserve this status quo but the lack of any meaningful reform is also due to its status as a rentier state. In Saudi Arabia the government owns the primary oil company, Saudi Aramco, and all mineral rights. The Saudi Royal family uses oil revenue to fund the public sector but also to "widen the political basis for the government in a country without parties or civil society in any Western sense."[45] Additionally, the royal family uses the state's coffers to award public contracts for the primary purpose of extending their political connections and ameliorating discontent and potential domestic adversaries through royal largesse.[46]

Once the oil revenues that are filling the state's (and royal family's) coffers begin to wane this system of rule through largesse will no longer be feasible. The royal family's traditional methods will be "put under strain as oil revenues [diminish] and the government must

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[43] Saudi Arabian Monetary Agency, http://www.sama.gov.sa
[44] Saif, *The Oil Boom in the GCC Countries*, 3.
[45] Heradstveit and Hveem, *Oil in the Gulf*, 45.
[46] *Ibid.*

delay payments to the private sector."[47] This change would diminish the royal family's ability to "gift" their way out of political problems leading to more political rivals and unrest.

The shrinking oil revenues would impact more than simply the royal family's politically motivated contracts; it would also cause the Saudi government to cut general public spending on social welfare. According to the Saudi Arabian Monetary Agency (SAMA), 25% of the most recent Saudi budget is earmarked for "general education, higher education, and manpower training." With regards to public education the budget provides funds for "the establishment of 1,200 new schools for males and females all over the Kingdom in addition to 3,112 schools under construction currently; not to mention over 770 schools which have already been completed during the year." Health and social services account for 8.6% of the budget. Those expenditures are being used to "complete building and equipping primary health care centers in all regions of the Kingdom, and projects to establish 8 new hospitals, replace and upgrade the infrastructure of 19 hospitals, in addition to the completion of furnishing and equipping a number of health facilities. Currently, 92 new hospitals are under construction throughout the Kingdom with a capacity of 17,150 beds." Additionally, monies are designated "for the establishment of sport clubs and cities[48], social care and social observation houses, rehabilitation centers," and "addressing poverty and the National Charity Fund with the aim of shortening time frame needed for ending poverty and its ongoing monitoring," in addition to providing more funding "for orphans and people with special needs."[49] The citizens of Saudi Arabia have grown accustomed to this level of expenditure on public welfare during the years of high oil prices.

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[47] *Ibid.*
[48] Sport cities are mixed-use developments centered near sport arenas.
[49] Saudi Arabian Monetary Agency, http://www.sama.gov.sa

The end of robust oil revenues would also put pressure on the Saudi Arabian government to cut its military spending. As was previously noted, the Saudi government spends a large amount on its military and security forces. In 2007, it spent roughly 9% of its GDP on the military.[50] Cutting military funding would likely be difficult for the Saudis. This difficulty would be largely due to the relationship between the military and the royal family. Members of the royal family are purported to receive "commissions" from military expenditures.[51] This makes a portion of defense spending actually a transfer payment from the government to various royals.[52] This would make cuts in defense exceedingly unpopular with the royal family. Moreover, with public spending and other forms of government largesse shrinking, the government will be more dependent than ever to rely on the military and other paramilitary security organizations to support and back the regime. This would make cutting funding, and potentially alienating the military cadre that has grown accustomed to large, padded budgets, extremely risky for the royal family.[53]

In addition to cutting public spending, the Saudi Arabian government would have to raise taxes to alleviate the short fall in revenue. This would be very difficult to accomplish and would have serious ramifications. The Saudi people have grown accustomed to living with a very low tax burden. The estimated overall tax burden for the country is 5.3%, with individual taxes only being assessed the 2.5% *zakat* that is compatible with Islamic law.[54] The imposition of new or higher taxes would likely be met with demands to move the government from an absolute monarchy towards more representation. Dr. Michael Ross, in a 2002 paper, argues that "a rise in

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[50] Stockholm International Peace Research Institute, http://www.sipri.org
[51] Noreng, *Oil and Islam*, 231.
[52] *Ibid.*
[53] *Ibid.*
[54] Heritage Foundation, 2010 Index of Economic Freedom, http://www.heritage.org

the price of government services is associated with subsequent democratization. A rise in the price of government services can either take the form of a rise in taxes for a constant set of government services, or a cut in government services with a constant level of taxes."[55] Furthermore, "When the price of government services goes up, authoritarian regimes tend to become – or perhaps, are forced to become – more accountable to their citizens."[56] This is precisely what would happen in Saudi Arabia as the lack of revenue causes services to be cut and taxes to increase.

The new taxes would likely elicit a call for political reforms to include increased popular representation. This could potentially alienate a portion of the population that believes democracy is fundamentally incompatible with Islam. "One interpretation of Islam is that it is inherently undemocratic because the source of laws is the Quran, and the duty of good Muslims is to obey them rather than to debate them."[57] These beliefs would be the source of further unrest inside Saudi Arabia as reforms were introduced.

As government services are reduced and taxes rise, the overall health of an economy already reeling from massive reductions is export revenue is weakened further. Public service cuts mean cuts in public sector employment. Increased taxes will weaken domestic consumption, likely leading reduced private sector employment. These two realities would lead to a considerable rise in unemployment. This would cause social unrest in any country, but it would be particularly disruptive to Saudi society due to an already staggering rate of population growth and the formation of a youth bulge. In order to maintain sustainable levels of unemployment, Saudi Arabia will need to add approximately 400,000 jobs annually between now and 2020.[58] In figure 3, which shows the population pyramid estimate for the year 2025, the

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[55] Michael Ross, *Does Taxation Lead to Representation*, 28.
[56] *Ibid.*
[57] David S. Sorenson, *An Introduction to the Modern Middle East*, 63.
[58] Wael Mahdi, "Analysts: Population Growth Straining Saudi,"

bulge can be seen.[59] The population bulge for both men and woman between the prime working ages of 25-45 years of age would further exacerbate the unemployment situation as even more workers are looking for employment than today. Between 2010 (shown in figure 2) and 2025 this age group is estimated to increase by 35%. As the population grows and labor demand falls unemployment would lead to additional poverty and discontent. Many factors led to the current unrest that is taking place in Egypt, but poor economic conditions seem to have been the primary catalyst. Egypt, while possessing a fundamentally different type of economy than Saudi Arabia, is a timely example of the importance of maintaining strong economic growth in order to provide opportunities to a growing population of workers.

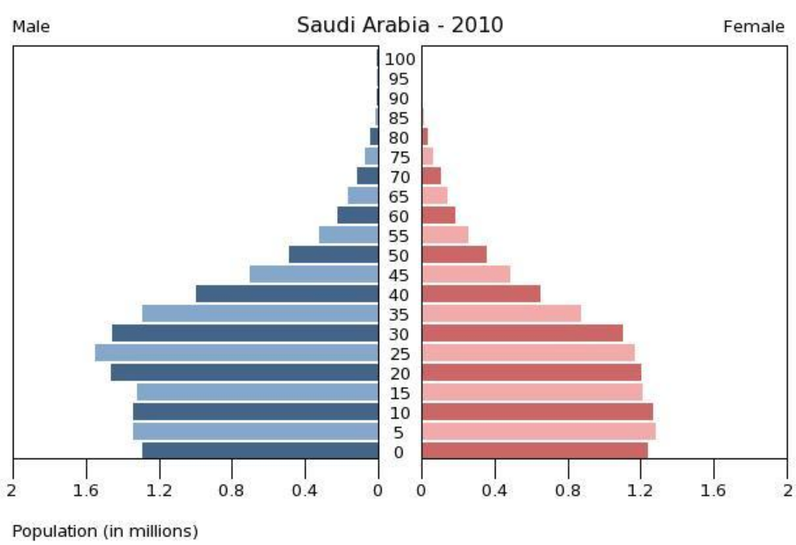

Figure 2

[59] US Census Bureau Estimates, http://www.census.gov

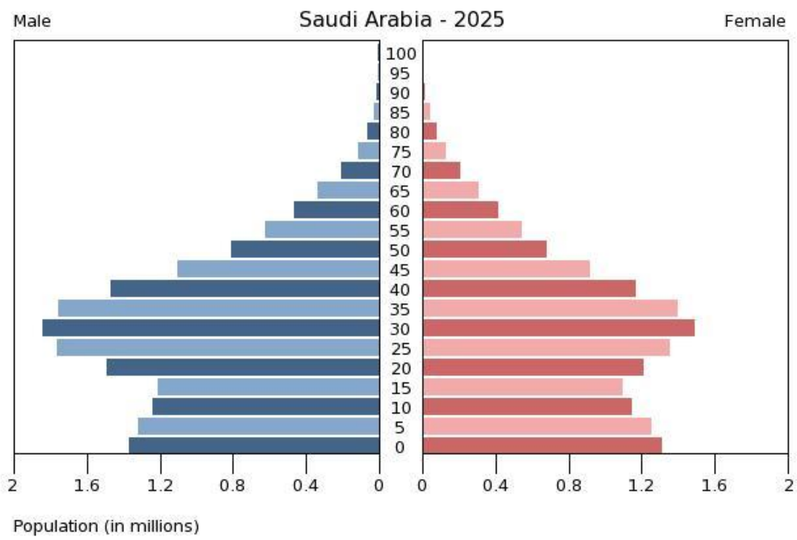

Figure 3

All told, these developments would serve as centrifugal forces and would severely weaken the regime and its legitimacy to rule. The reduction in social services combined with a crumbling economy would impact society in profound ways. "Rampant poverty, inequality, and large numbers of young men facing dim economic prospects produce both a humanitarian tragedy and a serious threat to those not so afflicted."[60] Without the ability to use government resources to assuage the growing number of have-nots, resentment towards the Royal family and other elites would likely grow. Internal dissidents that have been willing to look the other way while their welfare was improving, now begin to look for ways to further weaken the legitimacy of the monarchy. Furthermore, external Islamic fundamentalists that already accuse the regime of being an apostate and calling for its removal will be more inclined to act against the government, particularly if reforms are seen as anti-Islamic. The worsening social conditions within the country are likely to make finding anti-government operatives all the easier.[61]

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[60] Forrest, *The Making of a Terroris,* 165.
[61] *Ibid*.

Recommendations

Based on the real possibility of dramatic changes taking place with regard to the world oil market, the government of Saudi Arabia needs to look at making reforms now while it has the political and economic capital to make political and economic transitions easier to accomplish. The Great Recession has demonstrated how much impact a small, unforeseen event half a world away can have on the Saudi economy. From 2008 to 2009, the contribution of the oil sector to the Saudi GDP dropped from 61% to 48%.[62]

The Saudi government needs to implement a tax policy that allows them to use market forces to level the cost-to-benefit ratio against the petroleum industry. This would enable non-petroleum based industries to compete in the Saudi market. These non-petroleum industries would likely be more labor intensive than the oil sector. This would obviously help expand employment opportunities for the growing labor force.

Additionally, the Saudi government needs to begin political reforms now prior to a long term crisis that forces its hand at a less than ideal time. The Royal family needs to reach out to Islamic religious leaders to find ways to reform the political economy that conform to Islamic beliefs. A good starting point for this would be to institute greater transparency in the government. Moreover, making difficult political decisions will be easier while the economy is still experiencing growth.

Saudi Arabia also needs to look to the international community for guidance and support on developing the non-oil sector of the economy. It is not unique when it comes to its lack of diversification. Resources are available to the Saudis from the World Bank and the International

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[62] Saudi Arabian Monetary Agency, http://www.sama.gov.sa

Monetary Fund that could be accepted with having to deal without the political backlash that may come with accepting development help from solely the Western democracies.

Additionally, recent unrest in Greece and all out revolt in Egypt illustrate the perils that a government and a society can face when there is a massive shift in the economic landscape. In Greece, government austerity measures aimed at shrinking the nation's deficit caused a great deal of anger among the populace and resulted in massive strikes and protests that further damaged Greece's economy. The case of Egypt is far more harrowing. There the social unrest has resulted in violence, chaos, and ultimately regime change. The results of this upheaval remain to be seen, but these recent cases illustrate of how critical it is for the Saudis to diversify their economy and work towards political reforms.

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